

REMARKS/ARGUMENTS

Claims 1-32 are active in the case.

The rejection of Claims 1-32 under 35 U.S.C. §103(a) as unpatentable over EP0541359A1 is traversed.

Accompanying the response is a Declaration Under 37 C.F.R. §1.132 showing the superior properties in resistance to sedimentation and gelling, when the silica particle is coated with wax produced by the process of the present claims, as compared to coating a silica particle with wax produced by the process of EP0541359A1.

A silica particle was coated with wax by the process of the present claims in which the inlet temperature of the gas sprayed into the milling chamber was heated to a temperature between 140-160°C. A sedimentation test was carried out following the procedure outlined in EP0541359A1 using an alkyd urea lacquer equivalent to the alkyd urea lacquer described on page 3 of the reference. Sedimentation behavior was observed after 0, 4, 7, 12 and 19 days. Gelling behavior was also observed after 0, 4, 7, 12 and 19 days. The results of the tests are summarized in Table 2 of the Declaration. Table 2 also sets forth observations on phase separations and height of the silica phase in relation to the overall height of the above-mentioned dispersion. Interpretation of the results set forth in Table 2 may be assisted by viewing Figures A, B and C in the Declaration.

The data in Table 2 demonstrate that silica prepared according to the process of the present claims in which the inlet gas is heated to a temperature within the range of the present claims possesses superior resistance to sedimentation and gelling, as compared to silica prepared according to the process of EP0541359A1 and tested in Table II of EP0541359A1 on pages 7-9 of the reference in which the inlet gas temperature is 180°C, as specified on page 6, lines 41-43 of EP0541359A1.

Discussion of the results of Table 2 of the Declaration and Table II of EP0541359A1.

The silica of the present claims shows a soft sediment forming at 19 days and no hard sediment at 19 days. Test Examples 2-7 of Table II of EP0541359A1 show hard sediment forming in a period of 24 hours to 6 days, which is significantly inferior to the sedimentation properties of the silica formed by the process of the present claims showing no hard sediment at 19 days.

Further, no gelling was observed with the silica prepared according to the process of the present claims. All sample mixtures of the silica prepared according to the present claims could be stirred easily, even after 19 days. In contrast, Examples 1-3, 6 and 7 of EP0541359A1 showed thickening and/or gelling in a period of time from 6 hours to 3 days.

The test results of Table 2 of the Declaration clearly demonstrate the superiority of silica prepared according to the process of the present claims with a gas inlet temperature within the range of the present claims in resistance to sedimentation and gelling, as compared to silica prepared by the process of EP0541359A1 with a gas inlet temperature of 180°C. The superior results demonstrated in the Declaration Under 37 C.F.R. §1.132 distinguish the claims over EP0541359A1.

It is submitted that Claims 1-32 are allowable and such action is respectfully requested.

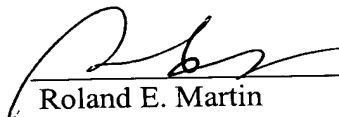
Respectfully submitted,

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